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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,449	08/17/2000	Nicholas David Butler	6169-179	6962

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EXAMINER

LERNER, MARTIN

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/641,449	<b>Applicant(s)</b> BUTLER ET AL.	
	<b>Examiner</b> Martin Lerner	<b>Art Unit</b> 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 to 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 to 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by *Stanford et al.*

Regarding independent claim 1, *Stanford et al.* discloses an interactive voice response system, comprising:

“a plurality of speech technology modules, at least one of the modules comprising a speech recognition engine for recognizing speech input from a user and at least one other of the modules comprising a text-to-speech engine for generating speech output for a user” – the system is primarily organized around the speech recognition functions deployed as speech recognition servers (“a speech recognition engine for recognizing speech input from a user”); a set of API calls in the recognition server (block 108) allows user applications (block 110) to request the services of the speech recognition system (column 9, line 66 to column 10, line 25: Figure 1); context voice response files 400 include a plurality of files 404; when the recognition server designates a new context over the context control line, a new context voice response

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file 404 is accessed and provided to the voice response output 402 (column 11, line 66 to column 12, line 43: Figure 1); in one embodiment, playback of audio files involves multiple WAV files combined with a text-to-speech subsystem (“at least one other of the modules comprising a text-to-speech engine for generating speech output for a user”) (column 4, lines 55 to 59);

“a voice application defining a plurality of interactions between a user and the speech technology modules” – user applications 110; user application programs 110 may include Executive Information Systems, Data Base Access via verbal query, software problem reporting systems, a telephone answering voice response unit, and a restaurant locator (column 10, lines 13 to 55: Figure 1);

“each interaction having a task property and an interaction environment property” – user applications can pre-register many contexts: a restaurant locator, a hard disk help desk, or software help desk can all pre-register multiple contexts hierarchically; each application will tell the recognition server to perform a recognition under a particular context for a particular speech stream, as appropriate for the task being executed (column 10, lines 42 to 55: Figure 1); a context is “a task property”; additionally, a supplemental dictionary 138 allows for the addition of the pronunciation of words not found in the base dictionary; in an application which provides information on area restaurants, a first context may be the type of restaurant the caller wants, e.g. French, Italian, Chinese and a second context once the type was established would be the restaurants in that particular category; in a restaurant help desk, restaurant name, particularly in foreign languages, but also unusual names for an American restaurant,

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will not be in the normal dictionary, and must be added to the task supplemental dictionary; these supplemental dictionaries contain local vocabulary which override the pronunciations in the base General English dictionary 132 (column 11, lines 4 to 23: Figure 1); supplemental dictionaries provide “an interaction environment property”; “a task property” involves a restaurant help desk with context voice response files 400 and context prompt display files 410 for a restaurant help desk; “an interaction environment property” involves supplemental dictionaries 138 for word pronunciations in foreign languages;

“a speech technology selection module for selecting, for each interaction, one of the speech technology modules from the plurality of the modules to be used by the application according to the environment property of the interaction” – Application Programming Interface (API) 108 generates a plurality of signals 406, 408 as API calls, or response signals, to select responses and provide context control involved in speech generation and speech recognition, respectively (column 10, lines 13 to 15; column 12, lines 6 to 29: Figure 1); the application program interface 108 offers recognition services which allow data stream control, context loading, and activation (column 8, lines 19 to 21: Figure 1); for a particular recognized speech string, recognition server 108 will output a corresponding response signal to the voice response output 402 over the response select 406; the response select 406 will identify which one of a plurality of stored digital voice responses are to be announced (column 12, lines 6 to 21: Figures 1 and 3); contexts (“a task property”) are associated with supplemental dictionaries 138

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("an environmental property of the interaction"), so recognition server 108 selects both contexts and supplemental dictionaries with response select 406.

Regarding claim 2, *Stanford et al.* further discloses:

"a plurality of parameter sets associated with each speech technology module" – mapping vectors 230 are stored along with the task recognition load module; applications arrange for the pre-storing of all tasks 240 and maps 230 they might require (column 13, line 62 to column 14, line 9: Figure 3);

"a parameter selection module for selecting one of the parameter sets for use with the selected speech technology module according to the environment property of the interaction and the task property of the interaction" – when a particular application requires and gets the focus of the recognition engine for recognition with a particular task ("the task property of the interaction"), the requested task search network is engaged by a simple assignment of one of several base pointers (column 13, line 62 to column 14, line 9: Figure 3); implicitly, pointer maps 230 also provide access to supplemental dictionaries 138 ("the environment property of the interaction").

Regarding claim 5, *Stanford et al.* further discloses user application programs 110 may include Executive Information Systems, Data Base Access via verbal query, software problem reporting systems, a telephone answering voice response unit, and a restaurant locator (column 10, lines 13 to 55: Figure 1); the type of application service being requested, e.g. restaurant locator, is the "call type" requested by the user from his/her telephone.

Regarding claim 6, *Stanford et al.* further discloses supplemental dictionaries 138 contain local vocabulary which override the pronunciations in the base General English dictionary (column 11, lines 4 to 23: Figure 1); thus, the supplemental dictionaries 138 (“an application environment property”) provide a pronunciation that “takes priority” over a pronunciation in the base General English dictionary 132.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Stanford et al.* in view of *Lee et al.*

*Stanford et al.* suggests contexts may involve pronunciations of foreign languages, but does not expressly disclose an environment property of a language identifier and a regional identifier. However, *Lee et al.* teaches a related voice interactive system, where a language server 300 receives requests from a user, and directs the output of messages in the user selected language (“a language identifier”). (Column 5, Line 45 to Column 6, Line 32; Column 7, Lines 3 to 22: Figure 3) Additionally, *Lee et al.* provides a language property rule table for regional language variants including American English and British English (“a regional identifier”). (Column 6, Lines 33 to 45: Figure 3) *Lee et al.* suggests a messaging server language

configuration method and apparatus that is efficient for dynamically configuring messaging servers for different languages without re-compiling the messaging program or re-writing the messages in another language. (Column 1, Line 20 to Column 2, Line 36) It would have been obvious to one having ordinary skill in the art to include language identifiers and regional identifiers as taught by *Lee et al.* in the voice response system of *Stanford et al.* for the purpose of providing an efficient messaging system for different languages without re-writing messages in another language.

### ***Response to Arguments***

5. Applicants' arguments filed 16 September 2004 have been considered but are moot in view of the new grounds of rejection.

Applicants' arguments are directed to the new matter rejection. Applicants' amendments to independent claim 1 overcome the rejection under 35 U.S.C. §112, 1<sup>st</sup> ¶, as setting forth new matter, by removing the limitation of "each module comprising a speech recognition engine and a text-to-speech engine", and replacing it with a new limitation.

However, Applicants' new limitation, while no longer presenting an issue of new matter, renders independent claim 1 again anticipated under 35 U.S.C. §102(b) by *Stanford*. Applicants' amendment has broadened independent claim 1, insofar as each speech technology module is no longer required to contain both a speech recognition engine and a text-to-speech engine. Now, Applicants' independent claim 1 only requires a plurality of speech technology software modules, where at least one of the



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modules is a speech recognition engine and at least one of the other modules is a text-to-speech engine. Independent claim 1, as amended is now broader by not requiring each of a plurality of modules to contain both a speech recognition engine and a text-to-speech engine. Instead, there now need be only one speech recognition engine and one text-to-speech engine.

*Stanford* discloses a speech recognition server 108 and context voice response files 404, where context voice response files 404 may be generated by a text-to-speech engine, so as to anticipate independent claim 1, as amended. Generally, the context voice response files 404 are disclosed to be WAV files for generating prompts. (Column 5, Line 35 to Column 6, Line 27) However, in one embodiment, *Stanford* discloses context voice response can be a combination of WAV files and a text-to-speech subsystem. (Column 4, Lines 55 to 59). Thus, *Stanford* anticipates independent claim 1 by disclosing a speech recognition server 108 and a text-to-speech subsystem for generating context voice response files 404.

Applicants' broadening of independent claim 1 presents new issues necessitating new grounds for a final rejection. A final rejection, as necessitated by amendment, is again proper, due to broadening of independent claim 1 by Applicants. *Stanford* again anticipates broadened independent claim 1, as amended.

Therefore, the rejections of claims 1, 2, 5, and 6 under 35 U.S.C. 102(b) as being anticipated by *Stanford et al.*, and of claims 3 and 4 under 35 U.S.C. 103(a) as being unpatentable over *Stanford et al.* in view of *Lee et al.*, are proper.

***Conclusion***

6. Applicants' amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

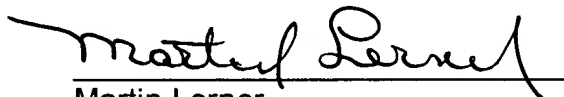
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (571) 272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML  
9/27/05

A handwritten signature in black ink, appearing to read "Martin Lerner", written over a horizontal line.

Martin Lerner  
Examiner  
Group Art Unit 2654